

IN THE CLAIMS:

Please cancel claim 2 and amend claims 1 and 3-16 as follows:

1. (Currently Amended) A Mmethod for applying extracorporeally generated acoustic pressure waves, specifically shock waves, to the body of an organism, comprising:

applying extracorporeally generated acoustic pressure waves to target tissue of the body;

detecting cavitation bubbles within the target tissue of the body caused by applying the extracorporeally generated acoustic pressure waves by receiving an acoustic signal at an extracorporeal detector and providing a received acoustic signal indicative thereof; and

processing the received acoustic signal to determine if cavitation bubbles are present within the target tissue of the body, and controlling the extracorporeally generated acoustic pressure waves based upon the received acoustic signal.

~~characterized in that the effect of the pressure waves within the treated target area is determined using cavitation bubbles generated within the tissue of the body by recording the acoustic signals of these bubbles using at least one preferably extracorporeally disposed detector.~~

2. (Cancelled)

3.(Currently Amended) The Mmethod of claim according to Claim-2, wherein the step of controlling comprises automatically adjusting ~~characterized in that the parameters of the generated acoustic pressure waves generated are adjusted by an automatic control.~~

4.(Currently Amended) The Mmethod of claim according to Claim-1, wherein the step of detecting cavitation bubbles comprises ~~characterized in that the effect of the pressure waves is~~

spatially scanned in the target area of the body using the cavitation effect measured by at least one focused acoustic detector.

5.(Currently Amended) The Mmethod of claim according to Claim 4, wherein the step of detecting comprises evaluating ~~characterized in that~~ the local change in the measured cavitation effect is ~~evaluated~~ to determine the interface between different tissue materials.

6.(Currently Amended) The Mmethod of claim according to Claim 4, wherein the step of detecting comprises evaluating ~~characterized in that~~ the local change in the measured cavitation effect is ~~evaluated~~ to determine the spatial tissue anatomy.

7.(Currently Amended) The mMethod of claim according to Claim 1, wherein the step of detecting comprises scanning to detect ~~characterized in that~~ the spatial change in the cavitation effect is ~~scanned~~ by at least one focused detector and that the spatial pressure field of the pressure waves is computed from the measured spatial distribution of the cavitation effect and the known tissue structure.

8.(Currently Amended) A Ddevice for applying extracorporeally generated acoustic pressure waves to the body of an organism, the device comprising:

including a pressure wave generator that generates an acoustic pressure waves; (1) and a treatment head that is operatively connect to the pressure wave generator and applies the acoustic pressure waves to a target area of the body(2);

~~characterized by: at least one an~~ acoustic detector (3a, 3b) brought in contact with the surface of the body to record the acoustic signals from the cavitation bubbles generated by the pressure waves and provide an detected signal indicative thereof; and

~~and characterized by~~ an electronic evaluation device that receives the detected signal and controls parameters of the acoustic pressure waves in response to the detected signal. ~~means (4) to which the signals from at least one detector (3a, 3b) are fed, the parameters for the pressure waves generated by the pressure wave generator (1) being adjusted in response to the signals processed in the electronic evaluation means (4).~~

9.(Currently Amended) The dDevice of claim 8, wherein the acoustic detector comprises
~~according to Claim 8, characterized in that~~ at least one detector (3a, 3b) that is focusable.

10.(Currently Amended) The Ddevice of claim according to Claim-9, wherein the acoustic
detector comprises ~~characterized in that~~ at least two detectors (3a, 3b) that are connected in a coincidence circuit.

11. (Currently Amended) The Ddevice of claim according to Claim-10, wherein the acoustic
detector ~~characterized in that the focus area of the at least one focused detector (3a, 3b) is~~
spatially adjustable for scanning thea target area of the body.

12. (Currently Amended) The Ddevice of claim according to Claim-11, wherein
~~characterized in that~~ the electronic evaluation device ~~means (4)~~ controls a display unit (5) which displays the measured cavitation effect.

13. (Currently Amended) The ~~D~~device of claim according to Claim 12, wherein the
~~characterized in that~~ the electronic evaluation ~~device means~~ (4) drives a feedback system (6).

14. (Currently Amended) The ~~D~~device of claim according to Claim 13, wherein the
~~characterized in that~~ the feedback system (6) includes a control unit (6a) which controls the
pressure wave generator (1) such that the actual value of the cavitation effect determined by the
at least one acoustic detector (3a, 3b) and the electronic evaluation ~~device means~~ (4) is adjusted to
match a predetermined target value.

15. (Currently Amended) The ~~D~~device of claim according to Claim 13, wherein
~~characterized in that~~ the feedback system (6) includes an actuating signal generator (6b) which
controls the spatial adjustment of the acoustic at least one detector (3a, 3b).

16. (Currently Amended) The ~~D~~device of claim according to Claim 13, wherein the
~~characterized in that~~ the feedback system (6) includes an image generator (6e) which feeds the
data generated by the electronic evaluation ~~device means~~ (4) to an image-processing system (7).